

INPAT- Impact Noise insulating Panel from textile industry waste

CIP-EIP-ECOINNOVATION-2010

INPAT product based on textile industry waste has an excellent performance both acoustically (impact and airborne noise), and thermal, moreover, its good properties of resistance to water vapor ensures good behavior under different conditions and durability for all the life cycle of a building. Environmentally, its production process is very energy efficient and the recyclability of the product reaches 100%.



INPAT acoustic characterization



Acoustic Classification

	INPAT 1000/15	INPAT 850/15	INPAT 600/10
UNE-EN ISO 11654:1998 European standard	α_w 0.35 Class D	α_w 0.35 Class D	α_w 0.25 Class E
ASTM C423-09a American standard	NRC 0.45 SAA 0.47	NRC 0.45 SAA 0.43	NRC 0.30 SAA 0.32
DB-HR (CTE) Spanish normative	α_{medio} 0.60	α_{medio} 0.55	α_{medio} 0.40

Impact noise reduction

SURFACE WEIGHT	ΔL (dB)					
	INPAT 1000/15 $S' = 6 \text{ MN/m}^3$	INPAT 850/15 $S' = 4 \text{ MN/m}^3$	INPAT 600/10 $S' = 4 \text{ MN/m}^3$	MW 20 mm $S' \leq 13 \text{ MN/m}^3$	PE-R 10 mm $S' \leq 75 \text{ MN/m}^3$	EEPS 20 mm $S' \leq 30 \text{ MN/m}^3$
S01 – 250 Kg/m ²	41 dB	44 dB	44 dB	30 dB	21 dB	25 dB
S02 – 60 Kg/m ²	33 dB	35 dB	35 dB	23 dB	-	17 dB
S03 – 40 Kg/m ²	33 dB	31 dB	31 dB	15 dB	15 dB	-

Comparison with other three commonly used isolation materials:

- MW- mineral wool 20mm thickness and dynamic stiffness 13MN/m³
- PE-R- Crosslinked polyethylene foam of 10mm thickness and 75MN/m³
- EEPS- Elasticized expanded polystyrene of 20mm thick and 30MN/m³

INPAT recycling



<http://inpat.aitex.net>

Project financed by the EC within the CIP-Ecoinnovation program.

ANTECUIR, S.L.
Calle de la Estación, 0
ES 03830- Muro de Alcoy
Phone: +34 966 54 40 01

Project Coordinator
Technical Coordinator.
Product development

Mr. Rafael Agulló r.agullo@antecuir.com
Mr. Bruno Marco bmarco@aitex.es
Mr. Angel Ruiz angel.ruiz@arifieltros.com